

In the Claims:

1. (Currently Amended) A stent assembly for maintaining the patency of a body lumen comprising an expandable stent with a cylindrical jacket encircling ~~the~~ said stent and secured thereto formed of a biocompatible, non-thrombogenic material which has a thinned layer of heterologous tissue less than 0.45 mm thick that is relatively impervious so as to prevent tissue buildup and migration of smooth muscle cells ~~impervious so as to prevent tissue growth.~~
2. (Currently Amended) The stent assembly of claim 45 wherein ~~the~~ said heterologous tissue is selected from the group consisting of pericardium, aortic leaflet, veins, and arteries and wherein the removed outer layer is of the same type of tissue as ~~the thinned layer of~~ said heterologous tissue.
3. (Currently Amended) The stent assembly of claim ~~48~~ 47, wherein ~~the~~ said pericardium is selected from the group consisting of bovine pericardium and porcine pericardium.
4. (Currently Amended) The stent assembly of claim ~~48~~ 3, wherein ~~the~~ said pericardium is bovine pericardium with cross-linked collagen.
5. (Currently Amended) The stent assembly of claim 1 including at least one therapeutic or diagnostic agent releasably contained in ~~the~~ said cylindrical jacket.
6. (Currently Amended) The stent assembly of claim 1 wherein ~~the~~ said material is expandable.
7. (Currently Amended) The stent assembly of claim 1 wherein ~~the~~ said stent comprises a metallic tubular member.
8. (Original) The stent assembly of claim 1 wherein ~~the~~ said cylindrical jacket is on an exterior surface of ~~the~~ said stent.

9. (Currently Amended) The stent assembly of claim 1 wherein ~~the~~ said cylindrical jacket is disposed within ~~the~~ said stent and secured to an interior surface of ~~the~~ said stent.

10. (Withdrawn) A method for maintaining the patency of a body lumen comprising the steps of:

- a) mounting on a delivery catheter a stent assembly comprising a tubular expandable stent with a cylindrical jacket formed of a biocompatible, non-thrombogenic expandable material, the cylindrical jacket comprising a thinned layer of tissue having a surface formed from removal of an outer layer of the tissue;
- b) advancing the delivery catheter through the body lumen until the stent assembly is positioned at a delivery location; and
- d) withdrawing the delivery catheter.

11. (Withdrawn) A cylindrical jacket formed of a thin layer of heterologous tissue which is less than 0.45 mm thick and which is configured to fit over a portion of an intraluminal stent.

12. (Withdrawn) The cylindrical jacket of claim 11 having a length of about 4 to about 200 mm.

13. (Withdrawn) The cylindrical jacket of claim 11 having a length of about 10 to about 50 mm.

14. (Withdrawn) The cylindrical jacket of claim 11 having a diameter of about 1.5 to about 60 mm.

15. (Withdrawn) The cylindrical jacket of claim 14 having a diameter of not greater than about 6 mm.

16. (Withdrawn) The cylindrical jacket of claim 11 having a diameter of about 2.5 to about 50 mm.

17. (Withdrawn) The cylindrical jacket of claim 11 having a thickness of about 0.05 mm to about 0.2 mm.

18. (Withdrawn) The cylindrical jacket of claim 11 having a thickness of about 0.1 mm to about 0.15 mm.

19. (Withdrawn) The cylindrical jacket of claim 11 configured to fit over an outer portion of the intraluminal stent.

20. (Withdrawn) The cylindrical jacket of claim 11 configured to cover an inner portion of the intraluminal stent.

21.-28. (Canceled).

29. (Currently Amended) An expandable jacketed stent for supporting a body lumen comprising:

a metallic tubular member ~~which has~~ having an outer surface, ~~which has~~ a first circumference for delivery and ~~which is~~ configured to expand from ~~the~~ said first circumference to a second circumference ~~larger than the first circumference~~ for deployment within the body lumen; and

a cylindrical jacket ~~which is~~ formed of thinned heterologous tissue less than 0.45 mm thick, which is relatively impervious so as to prevent tissue buildup and migration of smooth muscle cells impervious to tissue in growth and which encircles ~~the~~ said outer surface of the ~~stent~~ said tubular member in a wrapped configuration wherein said cylindrical jacket is configured to unwrap as the stent said tubular member expands from the said first circumference to said second circumference the second configuration.

30. (Currently Amended) The jacketed stent of claim 29 wherein ~~the~~ said jacket has a circumference larger than said first circumference and about equal to said second circumference. ~~on the unexpanded stent larger than the first circumference of the stent, and a circumference on the expanded stent about equal to the second circumference of the stent.~~

31. (Canceled).

32. (Withdrawn) A method of treating a patient, comprising:

- a) providing an elongated delivery catheter having an expandable member on a distal extremity thereof;
- b) mounting onto the expandable member on the distal extremity of the delivery catheter an expandable stent having first circumference and a second expanded circumference and having a cylindrical jacket formed of biocompatible, non-thromobogenic expandable material on an outer surface of the stent, the jacket having a width about equal to the second expanded circumference of the stent;
- c) advancing at least the distal extremity of the catheter within a body lumen of the patient until the jacketed stent is disposed at a desired location within the body lumen;
- d) expanding the expandable member on the distal extremity of the catheter to expand the jacketed stent mounted thereon and fix the expanded jacketed stent within the body lumen; and
- e) contracting the expanded expandable member so the elongated delivery catheter can be removed from the patient.

33.-34. (Canceled).

35. (Currently Amended) The stent assembly of claim 1, wherein ~~the~~ said cylindrical jacket is substantially shorter than said stent. ~~has a length less than length of the stent.~~

36. (Currently Amended) The stent assembly of claim 1, wherein ~~the~~ said cylindrical jacket is longer than said stent by not more than 5%. ~~has a length greater than a length of the stent, the length of the cylindrical jacket being not more than 5% greater than the length of the stent.~~

37. (Currently Amended) The stent assembly of claim 1, wherein ~~the stent is expandable from an unexpanded configuration to an expanded configuration, and wherein the~~ said cylindrical

jacket has a circumference larger than a circumference of said stent in an unexpanded configuration and about equal to said circumference of said stent in an expanded state. ~~on the unexpanded said stent larger than a circumference of the stent in the unexpanded configuration, and a circumference on the expanded stent about equal to a circumference of the stent in the expanded configuration.~~

38. (Currently Amended) The jacketed stent of claim 29 wherein ~~the~~ said jacket in ~~the~~ said wrapped configuration also encircles ~~on the unexpanded stent is wrapped about the stent and~~ at least a section of itself so that multiple layers of said jacket are present on at least part of ~~the~~ said unexpanded tubular member. ~~stent.~~

39.-40. (Canceled).

41. (Currently Amended) The jacketed stent of claim 38 including at least one securing member releasably fixing ~~the~~ said jacket in ~~the~~ said wrapped configuration prior to said expansion of said tubular member. ~~the stent.~~

42. (Currently Amended) The jacketed stent of claim 29 wherein ~~the jacket is a thinned layer of tissue having~~ said thinned tissue has a thickness of about 0.05 mm to about 0.20 mm.

43. (Currently Amended) The stent assembly of claim 1 wherein ~~the tissue surface~~ said heterologous tissue is a cut surface ~~formed~~ thinned by removal of ~~the~~ an outer layer of tissue.

44. (Currently Amended) The stent assembly of claim 43 wherein ~~the~~ said cut surface extends along a length of ~~the~~ said jacket, so that ~~the~~ said jacket has a reduced outer diameter along the length of ~~the~~ said jacket.

45. (Currently Amended) The stent assembly of claim 1 wherein ~~the~~ said heterologous tissue has been thinned by removing at least part of an outer layer thereof.

46. (Withdrawn) The cylindrical jacket of claim 11 wherein a surface thereof has been formed by removing an outer layer thereof.

47. (Canceled).

48. (Currently Amended) The stent assembly of claim 1 wherein ~~the~~ said heterologous tissue ~~layer~~ is pericardium.

49. (Currently Amended) The stent assembly of claim 43 wherein ~~the~~ said outer layer of tissue has been removed by peeling or shaving.